

AMENDMENTS

In the Claims:

Please amend Claims 26, 42, and 53 as follows. A Description of Claim Amendments is attached, showing the changes in claim language.

26. (amended) A method for producing an *in-situ* composite solder having an intermetallic component, comprising the steps of:

- f₁
- (a) providing a matrix solder comprising two metals;
 - (b) heating a mixture of said matrix solder with an intermetallic component at a temperature greater than the highest melting temperature of any of the individual components of said mixture so as to form a non-solid mixture; and
 - (c) cooling said non-solid mixture at a rate of at least about 100°C/second.

42. (amended) A method for producing an *in-situ* composite solder having an intermetallic component, comprising the steps of:

- f₂
- (a) providing a matrix solder comprising two metals;
 - (b) heating a mixture of said matrix solder with an intermetallic component at a temperature greater than the highest melting temperature of any of the individual components of said mixture so as to form a non-solid mixture;
 - (c) cooling said non-solid mixture to form a solid mixture;
 - (d) heating said solid mixture formed in step (c) to a temperature greater than the melting point of the components of said intermetallic component; and
 - (e) cooling the heated mixture of step (d) at a rate of at least about 100°C/second.

53. (amended) A method for producing an *in-situ* composite solder having an intermetallic component, comprising the steps of:

- f3
- (a) providing a binary or ternary eutectic or near eutectic matrix solder;
 - (b) heating a mixture of said matrix solder with an intermetallic component comprising a first row transition metal, at a temperature greater than the highest melting temperature of any of the individual components of said mixture so as to form a non-solid mixture; and
 - (c) cooling said non-solid mixture at a rate of at least about 100°C/second to form said composite solder wherein said intermetallic component has a particle size less than about 10 microns.